



IPW

PATENT
DOCKET NO.
ULS-001.01
(26036-101)

In re Application of:

Geenen, Vincent

Application No: 10/650,613

Filed: August 27, 2003

For: Tolerogenic Approach for Type I
Diabetes

Art Unit: 1647

Examiner: Not Yet Assigned

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on *May 20, 2005*.


Todd Williams

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. Copies of references AB through BG are enclosed.

REMARKS

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed:

- ☒ (1) within three (3) months of the **filing date** of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the **date of entry of the national stage** as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the **first Office Action** on the merits, or before the mailing of a **first Office Action** after the filing of a request for continued examination under 37 C.F.R. 1.114; or
- ☐ (2) after the period defined in (1) but before the mailing date of a **final action** or a **notice of allowance** under 37 C.F.R. 1.311, and
- ☐ the requisite Statement is below, **OR**
- ☐ the requisite fee under 37 C.F.R. 1.17(p), namely **\$180.00**, is included herein, or
- ☐ (3) after the mailing date of a **final action** or **notice of allowance** but before the payment of the **issue fee**, **AND**
- ☐ the requisite Statement is below, **AND**
- ☐ the requisite petition fee under 37 C.F.R. 1.17(p), namely **\$180.00** is included herein.

It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

STATEMENT

As required under 37 C.F.R. 1.97(e), Applicant(s), through the undersigned, hereby state either that [check the appropriate space only if either (2) or (3) is checked on the previous page and the Statement is required]:

- ☐ 1. Each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application **not more than three months** prior to the filing of the Information Disclosure Statement; or
- ☐ 2. No item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this Statement after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to **any individual** designated in 37 C.F.R. 1.56(c) **more than three months** prior to the filing of the Information Disclosure Statement.

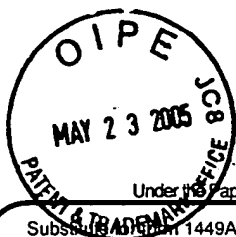
Respectfully submitted,



DeAnn Smith, Esq.
Attorney for Applicant(s)
Foley Hoag LLP
155 Seaport Boulevard
Boston, Massachusetts 02210-2600

Date: May 20, 2005
Reg. No. 36,683

Tel. No. (617) 832-1264
Fax No. (617) 832-7000



PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substantive Examination 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number	10/650,613
Filing Date	August 27, 2003
First Named Inventor	Geenen, Vincent
Art Unit	1647
Examiner Name	
Attorney Docket Number	ULS-001.01

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
	AA	US-6,197,926 B1	03/06/2001		

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AB	Durinovic-Bello I. The Role of T Cells, MHC Molecules and Autoantigens. Autoimmunity 27:159-177 (1998)	
	AC	Griffin, A.C. et al. Experimental Autoimmune Insulinitis. Induction by T lymphocytes Specific for a Peptide of Proinsulin. American Journal of Pathology 147:845-857 (1995)	
	AD	Kahn, et al. Genetics of Non-Insulin-Dependent (Type-II) Diabetes Mellitus. Annu. Rev. Med. 47:509-531 (1996)	
	AE	Dev, S.B. et al. Electrochemotherapy - a novel method of cancer treatment. Cancer Treatment Reviews 20:105-115 (1994)	
	AF	Campos, M. et al. Role of Interferon-γ in Inducing Cytotoxicity of Peripheral Blood Mononuclear Leukocytes to Bovine Herpesvirus Type 1 (BHV-1)-Infected Cells. Cellular Immunology 120:259-269 (1989)	
	AG	Alleva, D.G. et al. Immunological Characterization and Therapeutic Activity of an Altered-Peptide Ligand, NBI-6024, Based on the Immunodominant Type 1 Diabetes Autoantigen Insulin B-Chain (9-23) Peptide. Diabetes 51:2126-2134 (2002)	
	AH	Ziegler, A.G. et al. Life-Table Analysis of Progression to Diabetes of Anti-Insulin Autoantibody-Positive Relatives of Individuals With Type 1 Diabetes. Diabetes 38:1320-1325 (1989)	
	AI	Vardi, P. et al. Concentration of Insulin Autoantibodies at Onset of Type 1 Diabetes: Inverse Log-linear Correlation with Age. Diabetes Care 11:736-739 (1988)	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449/APTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT***(Use as many sheets as necessary)*

Sheet

2

of

3

Complete if Known

Application Number

10/650,613

Filing Date

August 27, 2003

First Named Inventor

Geenen, Vincent

Art Unit

1647

Examiner Name

Attorney Docket Number

ULS-001.01

AJ	Geenen, V. et al. The Intrathymic Expression of Insulin-related Genes: Implications for Pathophysiology and Prevention of Type 1 Diabetes. <i>Diabetes Metabolism Reviews</i> 14:95-103 (1998)	
AK	Pozzilli, P. et al. No Effect of Oral Insulin on Residual Beta-Cell Function in Recent-Onset Type 1 Diabetes (the IMDIAB VII). <i>Diabetologia</i> 43:1000-1004 (2000)	
AL	Dunckley, M.G. et al. Direct Retroviral-Mediated Transfer of a Dystrophin Minigene into mdx Mouse Muscle in vivo. <i>Human Molecular Genetics</i> 2:717-723 (1993)	
AM	Delovitch, T.L. et al. The Nonobese Diabetic Mouse as a Model of Autoimmune Diabetes: Immune Dysregulation Gets the NOD. <i>Immunity</i> 7:727-738 (1997)	
AN	Martens, H. et al. The Thymic Repertoire of Neuroendocrine Self-antigens: Physiological Implications in T-cell life and Death. <i>Immunology Today</i> 12:312-317 (1996)	
AO	Sampe, John W. et al. Processing and Presentation of Insulin. III. Insulin Degrading Enzyme: A Neutral Metalloendoproteinase that is Non-homologous to Classical Endoproteinases Mediates the Processing of Insulin Epitopes for Helper T Cells. <i>International Immunology</i> 4:1161-1167 (1992)	
AP	Sprent, J. Central Tolerance of T Cells. <i>Intern. Rev. Immunol.</i> 13:5-105 (1995)	
AQ	Wegmann, D.R. et al. Analysis of the Spontaneous T Cell Response to Insulin in NOD Mice. <i>Journal of Autoimmunity</i> 7, 833-843 (1994)	
AR	Alleva, D.G. et al. A Disease-associated Cellular Immune Response in Type 1 Diabetics to an Immunodominant Epitope of Insulin. <i>The Journal of Clinical Investigation</i> 107:173-180 (2001)	
AS	Liu, E. et al. Anti-peptide Autoantibodies and Fatal Anaphylaxis in NOD Mice in Response to Insulin Self-Peptides B:9-23 and B:13-23. <i>The Journal of Clinical Investigation</i> 110:1021-1027 (2002)	
AT	Bonomo, A. et al. Thymus Epithelium Induces Tissue-Specific Tolerance. <i>The Journal of Experimental Medicine</i> 177:1153-1164 (1993)	
AU	Czarnecki, C.W. et al. In Vitro Biological Activities of Escherichia Coli-Derived Bovine Interferons- α , - β , and - γ . <i>Journal of Interferon Research</i> 6:29-37 (1986)	
AV	Geenen, V. et al. Thymic Expression of Neuroendocrine Self-Peptide Precursors: Role in T Cell Survival and Self-Tolerance. <i>Journal of Neuroendocrinology</i> 10:811-822 (1998)	
AW	Chaillous, L. et al. Oral Insulin Administration and Residual β -cell Function in Recent-onset Type 1 Diabetes: a Multicentre Randomised Controlled Trial. <i>The Lancet</i> 356:545-549 (2000)	
AX	Rudy, G. et al. Similar Peptides from Two β Cell Autoantigens, Proinsulin and Glutamic Acid Decarboxylase, Stimulate T Cells of Individuals at Risk for Insulin-Dependent Diabetes. <i>Molecular Medicine</i> 1:625:633 (1995)	
AY	Kisielow, P. et al. Tolerance in T-cell-receptor Transgenic Mice Involves Deletion of Nonmature CD4 ⁺ 8 ⁺ Thymocytes. <i>Nature</i> 333:742-746 (1988)	
AZ	Ragot, T. et al. Efficient Adenovirus-mediated Transfer of a Human Minidystrophin Gene to Skeletal Muscle of mdx Mice. <i>Nature</i> 361:647-650 (1993)	
BA	Pugliese, A. et al. The Insulin Gene is Transcribed in the Human Thymus and Transcription Levels Correlate with Allelic Variation at the INS VNTR-IDD2 susceptibility locus for Type 1 Diabetes. <i>Nature Genetics</i> 15:293-297 (1997)	
BB	Vafiadis, P. et al. Insulin Expression in Human Thymus is Modulated by INS VNTR alleles at the IDDM2 Locus. <i>Nature Genetics</i> 15:289-292 (1997)	

Examiner
SignatureDate
Considered

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/650,613
		Filing Date	August 27, 2003
		First Named Inventor	Geenen, Vincent
		Art Unit	1647
		Examiner Name	
Sheet 3 of 3	Attorney Docket Number	ULS-001.01	

	BC	Kappos, L. et al. Induction of a Non-encephalitogenic Type 2 T Helper-cell Autoimmune Response in Multiple Sclerosis After Administration of an Altered Peptide Ligand in a Placebo-controlled, Randomized Phase II Trial. <i>Nature Medicine</i> 6:1176-1182 (2000)	
	BD	Atkinson, M.A. The Pathogenesis of Insulin-Dependent Diabetes Mellitus. <i>The New England Journal of Medicine</i> 346:1685-1691 (2002)	
	BE	DPT-Type 1 Diabetes Study Group Effects of Insulin in Relatives of Patients with Type 1 Diabetes Mellitus. <i>The New England Journal of Medicine</i> 346:1685-1691 (2002)	
	BF	Jolicœur, C. et al. T-cell Tolerance Toward a Transgenic β -cell Antigen and Transcription of Endogenous Pancreatic Genes in Thymus. <i>Proc. Natl. Acad. Sci. USA</i> 91:6707-6711 (1994)	
	BG	Greenen, V. et al. Evidence That Insulin-like Growth Factor 2 (IGF2) is the Dominant Thymic Peptide of the Insulin Superfamily. <i>Thymus</i> 21:115-127 (1993)	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--